

Ex Libris WALBERTA UNIVERSITATIS Albertensis

Copyright 1994, the Crown in Right of Alberta, as represented by the Minister of Education, Alberta Education, Student Evaluation Branch, 11160 Jasper Avenue, Edmonton, Alberta, T5K 0L2. All rights reserved. Additional copies may be purchased from the Learning Resources Distributing Centre.

Special permission is granted to **Alberta educators only** to reproduce, for educational purposes and on a non-profit basis, parts of this test that do **not** contain excerpted material **only after the administration of this test**.

Excerpted material in this test **shall not** be reproduced without the written permission of the original publisher (see credits page, where applicable).

Grade 3 Achievement Test Mathematics

Description

This test has two sections.

Section 1 has two parts for you to answer:

Part A has 26 questions Part B has 24 questions

Section 2 has addition and subtraction number facts.

Instructions to Students

Read each question carefully.

Choose the **BEST** or **CORRECT** answer.

You may use scrap paper to work out your answers.

You may use manipulatives when answering the questions.

Look at the examples to see how you should mark your answer.

Mark your answer in this booklet by filling in the circle next to your answer.

Use **ONLY** an HB pencil.

You can follow along as your teacher reads the story that comes before the questions in each part.

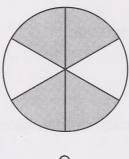
You need to read and answer the questions by yourself.

June 1994

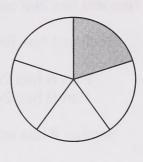
Example 1

Sarah ate $\frac{3}{5}$ of a pepperoni pizza.

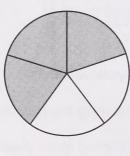
Which pizza is $\frac{3}{5}$ shaded?

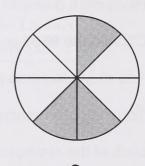


0



0





0

The correct answer in this example is . The circle below the correct answer has been filled in.

Example 2

Mama Mia's Pizza sold 275 pizzas one week. It sold 326 pizzas the next week.

How many pizzas did Mama Mia's Pizza sell during the two weeks?

- O 51
- O 591
- 601
- O 691

The correct answer in this example is **601**. The circle in front of the correct answer has been filled in.

Remember:

Mark only **ONE** answer for each question.

If you change an answer, erase your first mark completely.

DO NOT make any other marks on the pages.



SECTION 1: PART A

Follow along as your teacher reads this page aloud.

SARAH THE SLEUTH IN

THE CASE OF THE MISSING INGREDIENT

My name is Sarah. People call me Sarah the Sleuth.

I listen. I think. I work hard. I help people. I solve problems.

This case all started one sunny morning. I got a call. It was Tony from Tony's Pizza. He said, "Business is awful. No one comes to eat pizza here anymore. I need help. Where are all the pizza eaters?"

Tony called me because he knew I am a good detective. He knew I would help solve the problem. "I will help you," I said. "I, Sarah the Sleuth, will find out why no one is eating your pizza."

I needed to know more about the problem. I decided to get started.

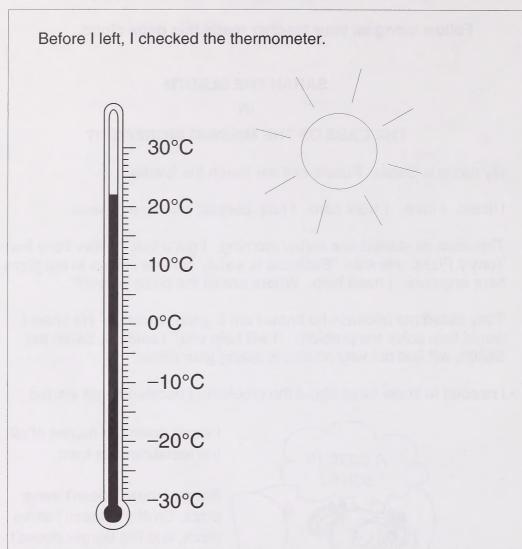


I wrote down the names of all the restaurants in town.

Burger House doesn't serve pizza, Smithy's doesn't serve pizza, and Big Burger doesn't serve pizza. I crossed them out.

The only name left was Mama Mia's Pizza. Mama Mia's serves pizza. I decided to go to Tony's Pizza and to Mama Mia's Pizza.

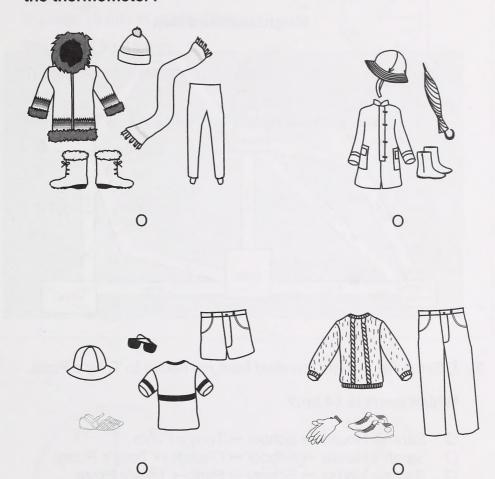
Use this picture to answer questions 1 and 2.



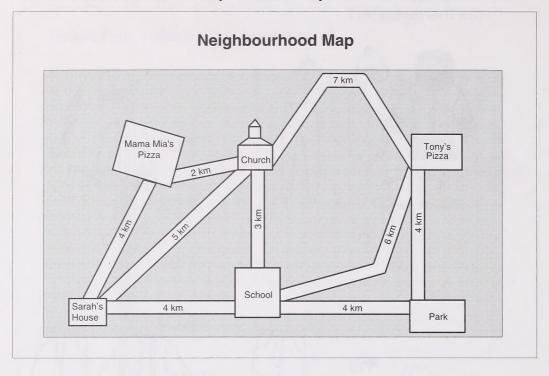
1. What temperature is shown on the thermometer?

- O -22°C
- O 18°C
- O 22°C
- O 24°C

2. Which type of clothing is best for the temperature shown on the thermometer?



Use this map to answer questions 3 and 4.



3. I, Sarah the Sleuth, travelled from my house to Tony's Pizza.

Which route is 14 km?

- O Sarah's House → School → Tony's Pizza
- O Sarah's House → School → Church → Tony's Pizza
- O Sarah's House → School → Park → Tony's Pizza
- O Sarah's House → Mama Mia's Pizza → Church → Tony's Pizza

4. I took the **shortest** route from my house to Tony's Pizza.

Which route did I take?

- O Sarah's House → School → Tony's Pizza
- O Sarah's House → Church → Tony's Pizza
- O Sarah's House → School → Park → Tony's Pizza
- O Sarah's House → Mama Mia's Pizza → Church → Tony's Pizza

I arrived at Tony's Pizza at 1:15.I waited 10 min to talk to Tony.We talked for 15 min.Then I sampled pizzas for 20 min.



What time was it when I finished sampling pizzas?



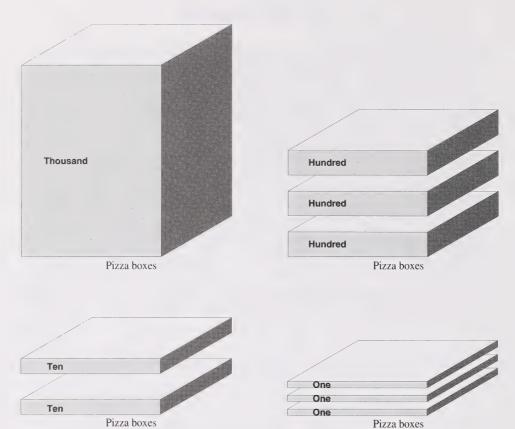






6. Tony checked his supply of unfolded boxes for pizza.

This is what he has:

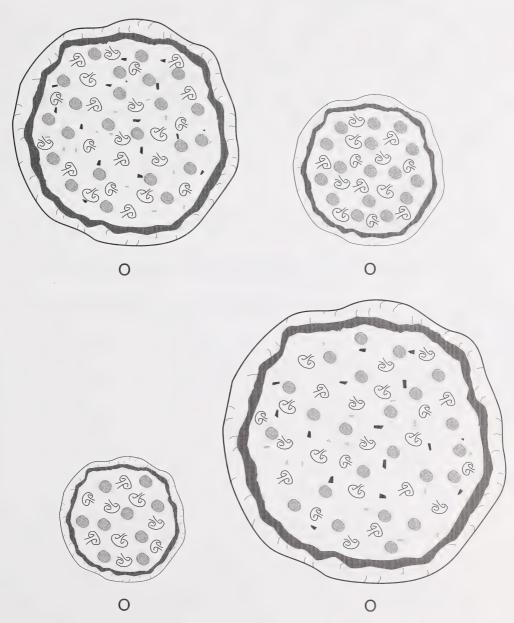


How many pizza boxes does Tony have?

- O 1 233
- O 1 323
- O 3213
- O 3 231

7. Tony looked for a picture of a pizza to put on new menus.
The picture has to be about 7 cm across the centre.

Which picture is closest to the size Tony needs?



Use this information to answer questions 8 and 9.

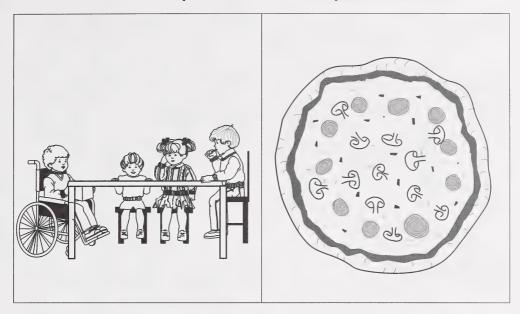
Tony's Pizza has 8 tables and 32 chairs. I saw 18 chairs with people sitting in them.

- 8. How many chairs are empty?
 - O 40
 - O 26
 - O 24
 - 0 14
- 9. Each table has the same number of chairs.

How many chairs are at each table?

- O 3
- 0 4
- O 5
- 0 6

Use these pictures to answer question 10.



10. The four people at the table share the pizza equally.

How much of the pizza does each person get?

- $0 \frac{1}{5}$
- $O \frac{1}{4}$
- $0 \frac{1}{3}$
- $O \frac{1}{2}$

Use this information to answer questions 11, 12, and 13.

I went to speak to the cook.

He showed me the chart for pizzas ordered last week.

Pizzas ordered last week		
Ham and Pineapple Pizza	HH HH HH HH HH	
Pepperoni Pizza	HH HH I	
Deluxe Pizza	HH HH HH HH HH III	
Mushroom Pizza	HH HH 11	

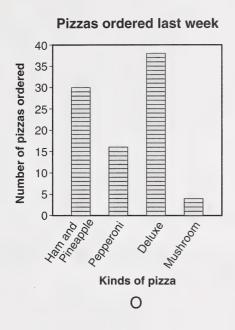
- 11. How many MORE ham and pineapple pizzas than pepperoni pizzas were ordered last week?
 - O 26
 - 0 21
 - 0 14
 - 0 9
- **12.** The cook said he puts 10 pieces of pepperoni on each pepperoni pizza.

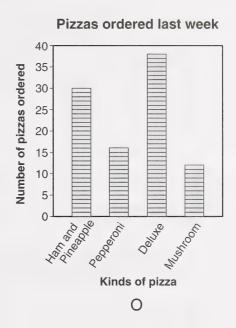
How many pieces of pepperoni did the cook use last week?

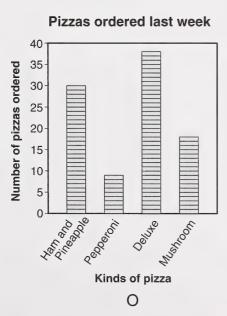
- O 130
- O 160
- O 300
- O 380

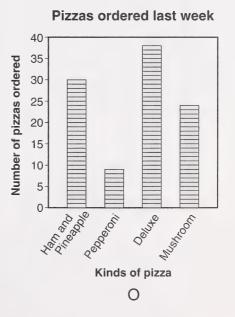
13. I made a graph in my notebook.

Which graph shows the same information as the pizza chart on page 10?









14. The cook showed me his order of supplies for next week.

He ordered 7 tins of tomato sauce.

Each tin holds 4 L of sauce.

How many litres of tomato sauce did the cook order?

- O 28 L
- O 21 L
- 0 7 L
- O 4 L
- 15. A large tin of pineapple holds 750 mL.

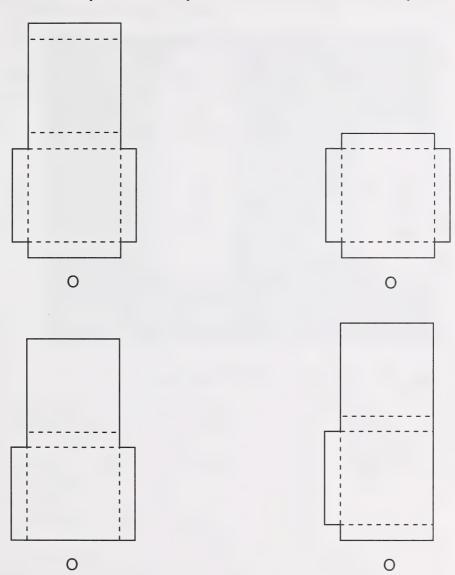
A small tin of pineapple holds 525 mL.

How many MORE millilitres are there in a large tin of pineapple than in a small tin of pineapple?

- O 225 mL
- O 235 mL
- O 600 mL
- O 1275 mL

16. The cook's helper was making boxes to pack pizzas in.

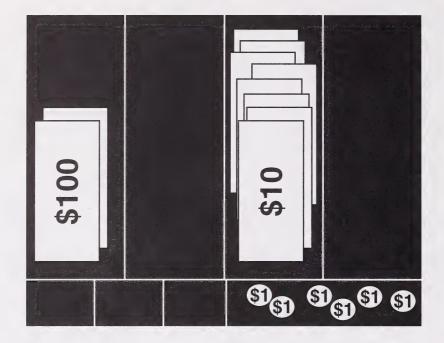
Which shape will fold up to make a closed box for a pizza?



17. A customer came up to pay for his pizza.

Tony opened his money box.

This is what it looked like.



How much money is in the money box?

- O \$286
- O \$682
- O \$200 806
- O \$600 802

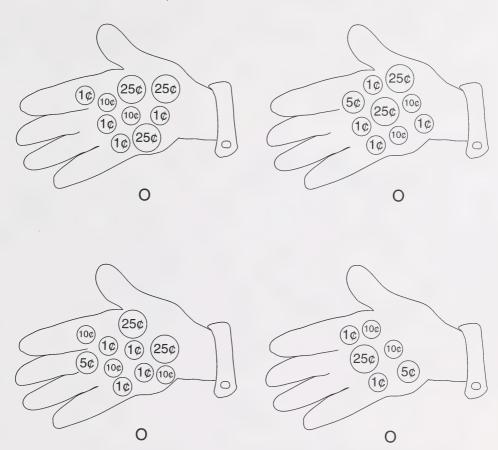
18. I, Sarah the Sleuth, then went to Mama Mia's Pizza.

I was thirsty!

I decided to buy a can of juice.

It cost \$0.89.

Which hand shows \$0.89?



19. I had 59¢ left in my pocket.

Which group of coins makes 59¢?

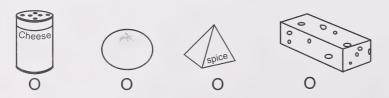
- O 1 quarter, 1 nickel, 4 pennies
- O 2 quarters, 1 dime, 1 nickel, 4 pennies
- O 2 quarters, 4 pennies
- O 5 dimes, 1 nickel, 4 pennies

20. I went into the kitchen at Mama Mia's Pizza.

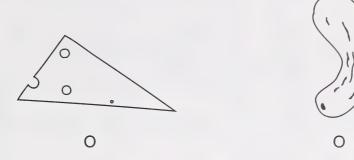
This is what I saw.



Which of the following shapes is a cylinder?



21. Which picture can be folded so that one half matches the other half?







22. On the wall by the phone, I saw this chart:

Pizzas ordered this week			
432	Mama Mia's Special		
702	Cheese		
234	Ham and Pineapple		
403	Pepperoni		

Starting at the top of my notebook, I wrote these numbers from **SMALLEST** to **LARGEST**.

Which notebook shows the numbers from smallest to largest?

702	234
432	403
403	432
234	702
0	0
432	234
702	432
403	403
234	702
0	0

23. I decided to leave the kitchen, finish my juice, and think for a while.
As I left the kitchen, I noticed that the restaurant was full of people.
There was also a long lineup.



Look at the lineup.

In which position is the person with the hat?

- O Tenth
- O Twelfth
- O Thirteenth
- O Nineteenth

- 24. It takes 2 min to seat each person in the lineup.
 - How many minutes will it take to seat 15 people?
 - O 15 min
 - O 17 min
 - O 30 min
 - O 32 min
- **25.** At Mama Mia's Pizza, they count the number of people served and record it on a chart.

This is what the chart shows.



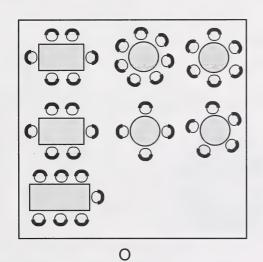
The next number to be served will be

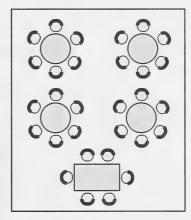
- O six thousand three hundred ninety-eight
- O six thousand four hundred
- O nine thousand nine hundred thirty-seven
- O nine thousand six hundred forty

26. I wanted to remember how many chairs there are in Mama Mia's Pizza. I recorded this number sentence in my notebook.

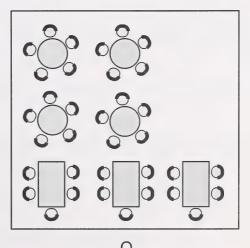


Which picture matches my number sentence?





0



END OF SECTION 1, PART A

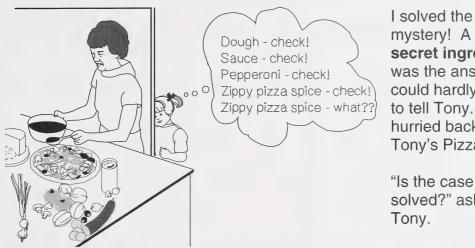
You may go back to check your answers.



SECTION 1: PART B

Follow along as your teacher reads this page aloud.

There was definitely something about Mama Mia's Pizza that the people seemed to like. I had a plan. While Mama was busy putting pizzas in the oven, I stepped quietly into the kitchen. I watched Mama make the next pizza.



mystery! A secret ingredient was the answer! I could hardly wait to tell Tony. I hurried back to Tony's Pizza.

"Is the case solved?" asked

"Yes, I have solved the case," I said.

"Well, what is the reason that no one comes to eat pizza here anymore?" Tony asked.

"Mama Mia has a secret spice. The people love it. You must use a secret spice too," I explained.

We went into the kitchen. Tony began to mix spices. Something was starting to smell good. "I've got it!" said Tony.

I, Sarah the Sleuth, sampled the new pizza spice. Yes, Tony had his own secret spice.

"We will have a party," said Tony joyfully.

"Yes," I said, "and we will eat pizza with the secret spice!"

Use this information to answer questions 27 and 28.

We planned the party.

Today is July 14.

We decided that the party will be one week from today.

July

S	M	Т	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

27. What is the date of the party?

- O July 14
- O July 20
- O July 21
- O July 22

28. On what day of the week will the party be held?

- O Tuesday
- O Wednesday
- O Thursday
- O Saturday

29.	Invitations are sold in boxes of 10. Tony and I decided to invite 28 people.					
	How many BOXES of invitations should we b					
	0 0 0	3				
30.	How	many invitations will be left over?				
	0 0	2 5				

31. Tony and I can make invitations for 9¢ each.

How much would 10 of these invitations cost?

O \$0.19 O \$0.90 O \$1.09 O \$1.90

0 12

32. The party is going to start 30 min after one o'clock.

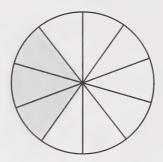
What time should I write on the invitations?

0	12:30
0	1:00
0	1:30
0	2:00

Use this information to answer questions 33 and 34.

"We need pizza for the party," I said.

"One person usually eats this much pizza," Tony said. He drew a picture and shaded in the number of pieces that one person usually eats.



33. Which fraction shows the SHADED part of the pizza?

- O $\frac{3}{10}$
- O $\frac{7}{10}$
- $O = \frac{3}{1}$
- O $\frac{3}{7}$

34. Which decimal shows the SHADED part of the pizza?

- O 0.3
- O 0.7
- O 1.0
- O 3.0

35. On the day of the party Tony said, "I will make 2 pepperoni, 3 ham and pineapple, 6 deluxe, and 1 mushroom pizza."

How many pizzas will Tony make altogether?

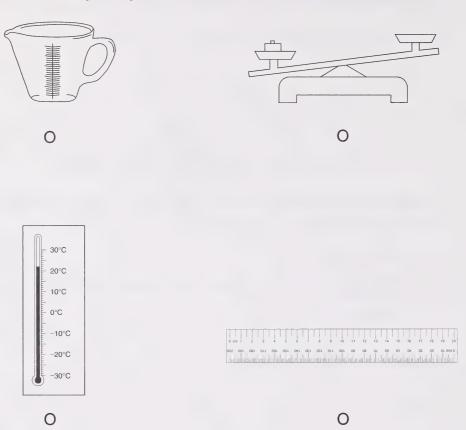
- O 5
- 0 11
- 0 12
- O 30
- **36.** It takes Tony 2 min to put toppings on a deluxe pizza.

To find out how many minutes it will take to put toppings on the 6 deluxe pizzas, Tony should

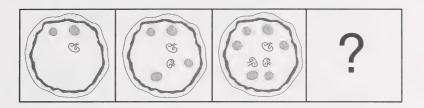
- O add 2 and 6
- O subtract 2 from 6
- O divide 6 by 2
- O multiply 6 by 2

37. Tony said, "I'd better get started on those pizzas."

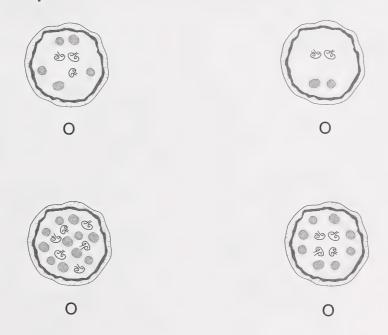
Which instrument should Tony use to measure the distance across the pizza pan?



38. I saw a pattern as Tony made a pizza.

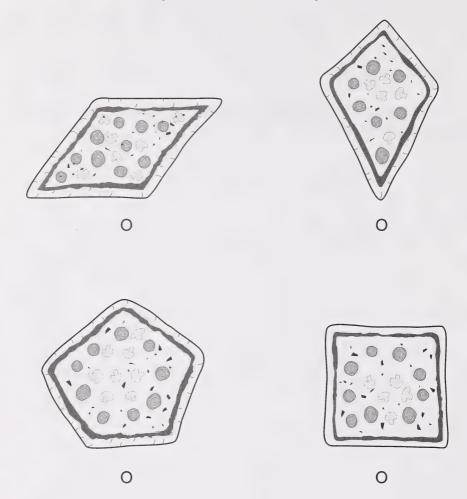


If the pattern continues, which picture below shows the finished pizza?



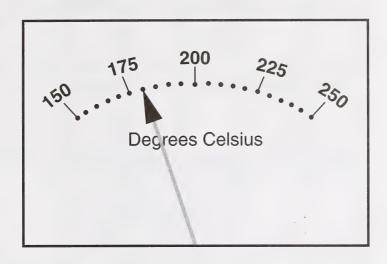
39. Tony can make pizzas of different shapes.

Which of these shapes is most like a square?



40. Tony is ready to bake the pizzas.

The oven temperature must be 210°C to bake pizzas.



How many degrees must the oven temperature rise before Tony can bake the pizzas?

- O 30°
- O 40°
- O 150°
- O 170°

41. Tony put a pizza in the oven.

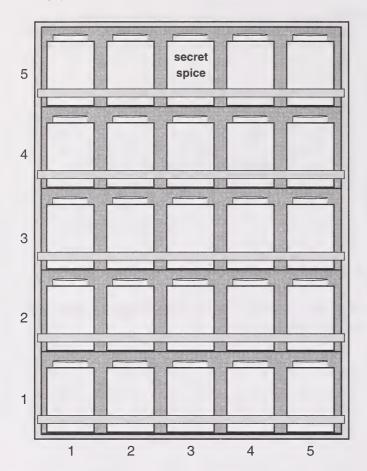
A pizza pan weighs 525 g.

A deluxe pizza weighs 876 g.

How much do they weigh together?

- O 1301 g
- O 1391 g
- O 1401 g
- O 1491 g

42. Tony put the secret spice in his spice rack.



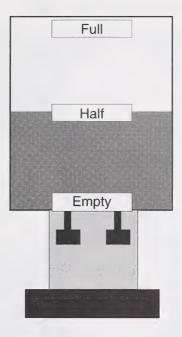
The secret spice is located

- O across 2, up 4
- O across 5, up 3
- O across 3, up 5
- O across 4, up 2

43. Tony checked the juice machine.

When it is full, the juice machine holds 20 L of juice.

Now it is half full.



How many litres of juice are left in the juice machine?

- O 10 L
- O 15 L
- O 20 L
- O 40 L

44. I filled two 250 mL cups with juice.

How much juice is this?

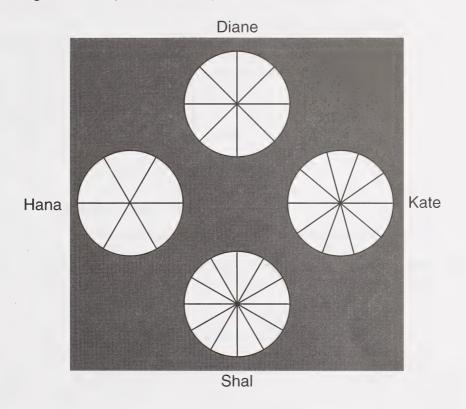
- O More than 1000 mL
- O Less than 500 mL
- O 1000 mL
- O 500 mL

45.	Altogether, 21 people said they would come to the party.
	So far, 15 have arrived.

How many more people are coming?

- O 3 O 4 O 5 O 6

46. Diane, Kate, Shal, and Hana came to the party. Each girl's pizza was cut in different sizes. Each girl ate two pieces of her pizza.



Who ate the most pizza?

- O Diane
- O Kate
- O Shal
- O Hana

Use this pictograph to answer questions 47 and 48.

The guests talked about their favourite pizza. Tony drew a pictograph of their choices. Ham and Pineapple 000000

Pepperoni

00000

Deluxe | @ @ @ @ @

Mushroom | © © ©

Means one person

47. Which kind of pizza did the FEWEST guests choose as their favourite?

- Ham and Pineapple
- O Pepperoni
- 0 Deluxe
- Mushroom

48. How many guests chose the Deluxe pizza as their favourite?

- 7
- 6
- 5

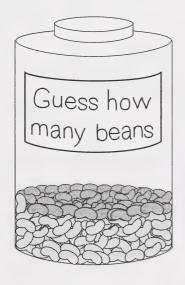
49. We had two contests at the party. I, Sarah the Sleuth, gave a prize to the person who could write this number in standard form:

$$6 + 500 + 70 + 8000$$

In standard form, this number is written as:

- O 6 578
- O 8 576
- O 500 768
- O 805 706
- **50.** There are 409 beans in this jar.

Tony gave a prize to the person with the closest guess.



Ryan guessed 362.

Carrie guessed 398.

Angela guessed 419.

Terry guessed 445.

Who won the contest?

- O Ryan
- O Carrie
- O Angela
- O Terry

"Eat lots of pizza," Tony said to the guests. Everyone ate lots of pizza.

They all liked Tony's pizza with the secret spice.

A lot of the pizza eaters said they would eat at Tony's Pizza from now on.

Many pizzas later, everyone went home.

I went home. I was tired. I was full.

Tony doesn't need a detective anymore. My first pizza case is solved.

END OF SECTION 1, PART B

You may go back to check your answers.



SECTION 2: NUMBER FACTS

The next part of the test will be **timed**.

Addition

32 questions

2 minutes

Subtraction

32 questions

2 minutes

Your teacher will tell you when to **start** and when to **stop** each set.

Answer as many questions as you can.

Do not turn this page until your teacher tells you to do so.

ADDITION

CONTINUED ON NEXT PAGE

ADDITION



SUBTRACTION

CONTINUED ON NEXT PAGE

SUBTRACTION





National Library of Canada Bibliothèque nationale du Canada 3 3286 50428 8107							
Student name (please print):	eacher: Please refer to the	26787	ooklet Number				

to the Teacher's Manual for full instructions about how to complete this page. Grade 3 Achievement Test Mathematics

8. Sex (check one): Male Female	in Mathematics (check one): English French Other	7. Language of instruction Other	6. Program (check one): English Francophone	5. Special Purpose:	4. City/Town:	3. School Code:	(First name) 2. School (please print):	
October November December	July August September	April May June	January February March	Month	9. Birth Date (check the month and year):		(Last name)	
	1986 1987 1988	1983 1984 1985	1980	Year				

